## Message

From: Thomas, Katie (Sanders) [Katie\_Thomas@sanders.senate.gov]

**Sent**: 7/27/2017 9:00:59 PM

**To**: Brown, Rudy [Brown.Rudy@epa.gov]

Subject: RE: Ammonia in Residential Heat Pump Applications

Thanks, Rudy!

From: Brown, Rudy [mailto:Brown.Rudy@epa.gov]

Sent: Thursday, July 27, 2017 4:58 PM

**To:** Thomas, Katie (Sanders) < Katie\_Thomas@sanders.senate.gov> **Subject:** FW: Ammonia in Residential Heat Pump Applications

Katie,

Below is the information that I received from program staff.

There are no EPA rules here for residential applications. See response below.

Thanks.

From: Moskal, John

Sent: Thursday, July 27, 2017 4:47 PM

To: Brown, Rudy <a href="mailto:Srown.Rudy@epa.gov">Srown, Rudy@epa.gov</a>; Conroy, David <a href="mailto:Conroy.Dave@epa.gov">Conroy, David <a href="mailto:Conroy.Dave@epa.gov">Conroy.Dave@epa.gov</a>>

**Cc:** Greene, Cynthia < Greene. Cynthia@epa.gov>

Subject: RE: Ammonia in Residential Heat Pump Applications

No EPA rules here for residential applications. For larger commercial refrigeration systems, you are likely to trigger the RMP rule. The small scale heat pumps they are discussing here wouldn't meet that threshold though. That said, they would be subject to UL certification for safety purposes before being able to be sold/installed in the US. Hope that helps.

From: Thomas, Katie (Sanders) [mailto:Katie\_Thomas@sanders.senate.gov]

To: Brown, Rudy <a href="mailto:Brown.Rudy@epa.gov">Brown, Rudy@epa.gov</a>>

Cc: Pero, Haley (Sanders) < Haley Pero@sanders.senate.gov>; Hinch, Ethan (Sanders)

<Ethan Hinch@sanders.senate.gov>; Akerlof, Karen (Sanders) <Karen Akerlof@sanders.senate.gov>

Subject: FW: Ammonia in Residential Heat Pump Applications

Hey Rudy,

Can you help us out with a question we got from a constituent regarding federal restrictions on the use of Ammonia in residential heat pump applications? We're not aware of any existing restrictions, so we wanted to check with you.

Thanks!

ΚT

**Katie Thomas** 

Policy Advisor for Energy and Environment

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From: Hinch, Ethan (Sanders)

Sent: Wednesday, June 28, 2017 3:51 PM

To: Thomas, Katie (Sanders) < Katie Thomas@sanders.senate.gov >; Akerlof, Karen (Sanders)

<Karen Akerlof@sanders.senate.gov>

Subject: Ammonia in Residential Heat Pump Applications

Hi Katie and Karen,

We received the following constituent letter back in February:

Hi,

on the energy committee could you R717 (Ammonia) NH3 Refrigerant pass or approve permit the use of R717 (Ammonia) NH3 Refrigerant in all applications including residential heat pump applications

Are either of you familiar with federal restrictions on the use of Ammonia in residential heat pump applications? I'm not able to find anything online that indicates that there are any restrictions, just that concentrated ammonia is highly toxic and risky to use in domestic applications.

## Thanks!

Ethan Hinch
Legislative Correspondent
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